Classic Bombé Chest

The flowing curves, breathtaking veneer, and large drawers make this elegant chest a fashionable and functional piece of furniture.

The origin of the bombé chest can be traced back to eighteenth-century France. It was one of many unconventional designs that resulted from relaxed standards imposed on craftsmen after the death of Louis XIV. Under Louis XV, artisan builders were free to experiment and move away from the more traditional designs. A variety of new shapes, carvings, and details emerged.

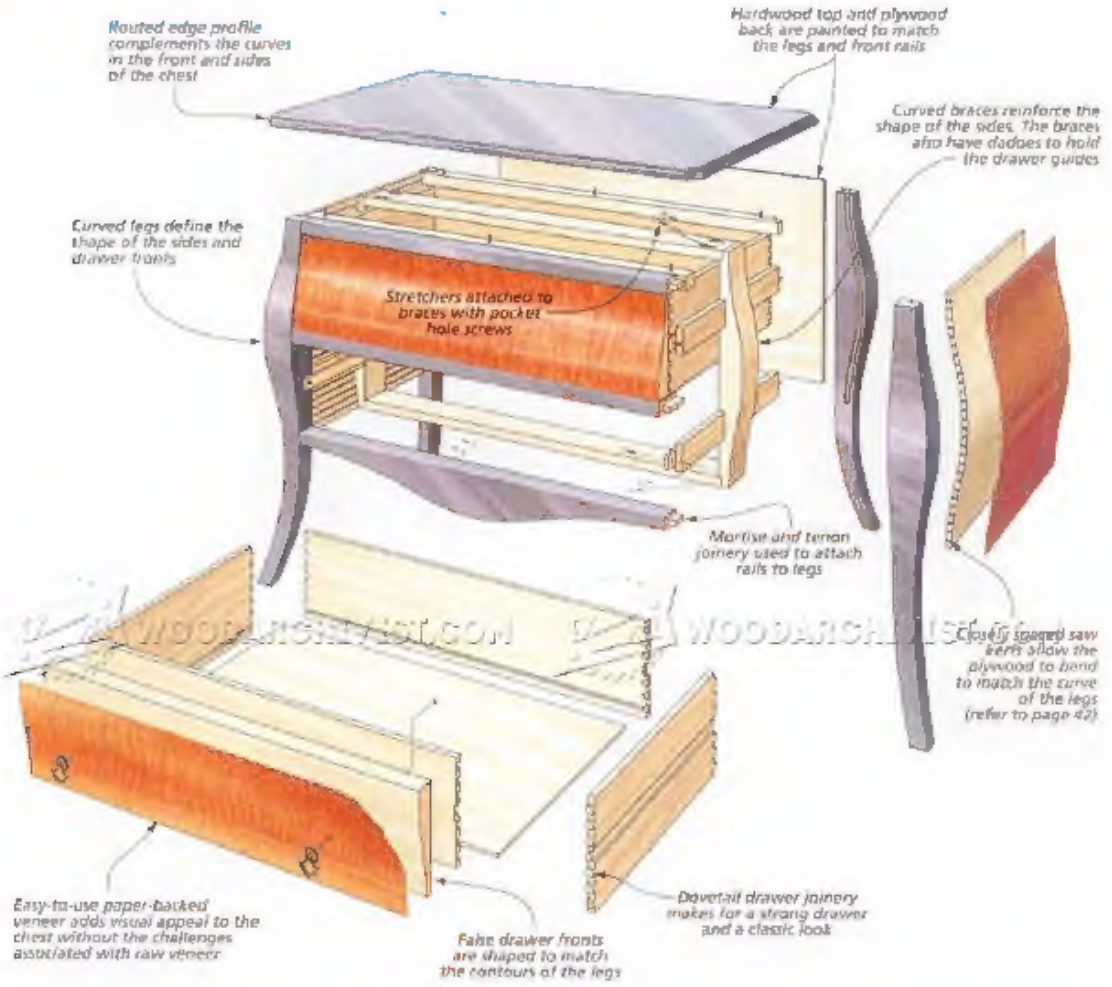
Today, bombé chests show up on many woodworkers' bucket lists of the projects they hope to tackle before they hang up their tools. The distinctive curved sides and drawer fronts offer an almost irresistible challenge.

Over the years, several methods for making the curved pieces have been developed. Most traditional designs required large, 4"-thick slabs of mahogany that could be cut and sculpted into the bulging, curved sides.

Today, the requirement for that kind of stock puts the cost out of reach for most of us. So with this design, I wanted to make the bombé style accessible to the average woodworker by using materials that are both affordable and relatively easy to find.

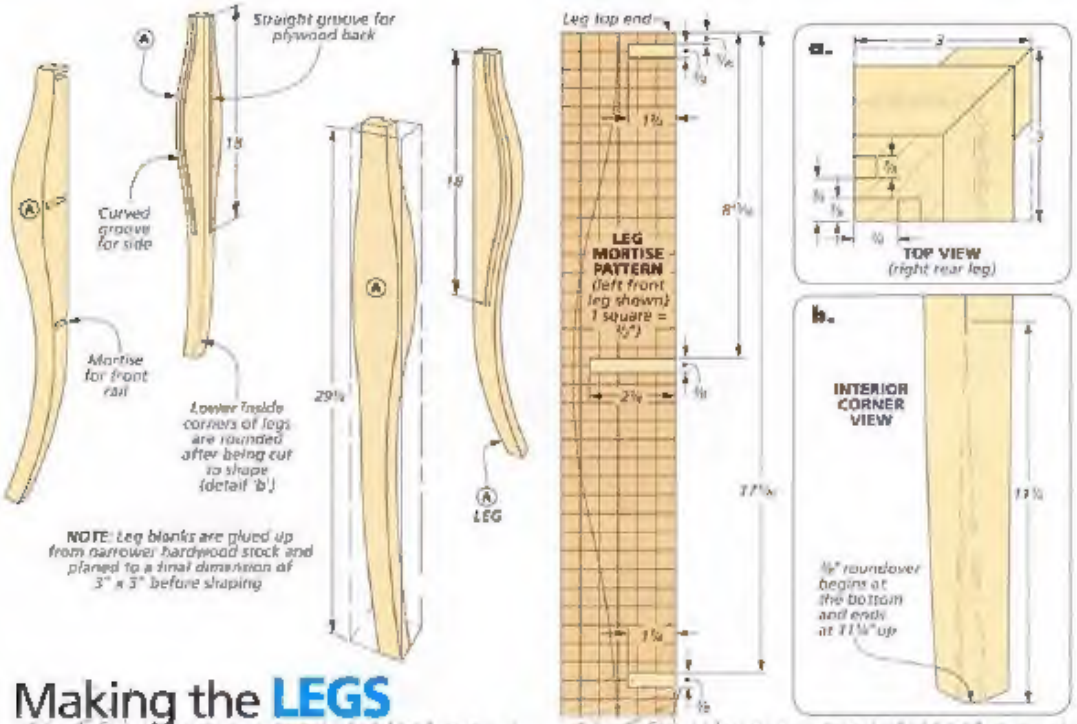
But don't worry. The choices won't compromise the quality or appearance of the chest. I used painted poplar for the primary hardwood and cabinet-grade plywood for the curved panels. The chest is a perfect opportunity for showing off a unique veneer (I chose lacewood). I've also used a straightforward kerf-bending technique that makes shaping the curved panels a breeze.

Construction Overview / OVERALL DIMENSIONS: 38"W x 30"H x 24"D



◀ The false drawer fronts are curved, but the drawer boxes are straight and square. You can see how to make the false fronts on page 40.

By cutting a series of saw kerfs in the plywood panels, you can fit them into curved grooves in the legs to define the shape of the bulging sides. ▶



Making the LEGS

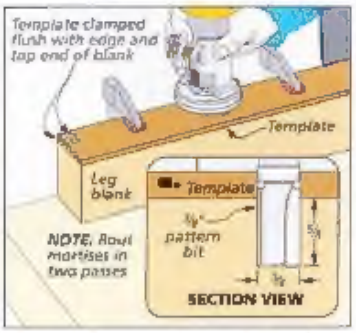
The legs are at the heart of the bombe chest, defining the curves of the entire piece. As you can see, they're curved on all four faces. In addition, the two front legs hold mortises for the front rails. Each leg also has a groove that runs parallel to the outside curve for the side panels. A straight groove in the rear legs holds the back. I used templates to cut and shape the legs. They're invaluable when making matching parts for a curved project.

BLANKS. I started out by gluing up four blanks for the legs. After cleaning up the glue and jointing the blanks, I planed them all to 3" square.

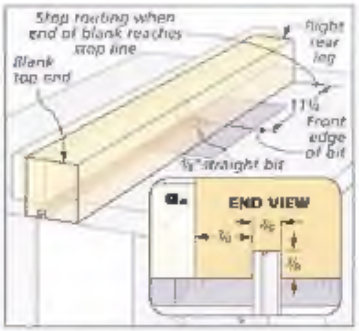
LAYOUT. Before you start shaping the legs, you'll need to lay out the position of the mortises and grooves. All the joinery cuts need to be made while the blanks are still square. It's a good idea to mark the leg positions on the top of each blank so you can keep them straight and avoid confusion.

MORTISES. The left drawing above has a pattern you can use to make a template for routing the mortises in the front legs. I used ¼" hardboard for

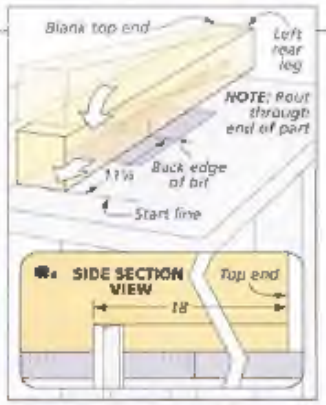
How-To: ROUT MORTISES



Front Leg Mortises. Clamp the hardboard template to the leg blank, making sure the end is registered at the top.



Routing Rear Legs. Measure from the outside edge of the bit and draw stop and start lines for routing.



Left Rear Leg. For the left leg, you'll need to drop into the cut using the lines on the table as your guide.

the template. Cut the three ⅜"-wide notches on the templates at the table saw with the blade raised to match the length of the mortises. All you need to do is "nibble away" the waste.

One unusual thing about the mortises is the orientation. They run horizontally to hold the three rails that form the openings for the drawers. They also extend to the inside edge of the legs, so routing them is the easiest option. Just clamp the template to the blank and use a ⅜"-dia. pattern bit to rout the mortises. The left drawing at the bottom of the opposite page shows you how to do it.

GROOVES. I turned to the router table to rout the stopped grooves in the rear legs that hold the back. The center and right drawings in the box on the facing page show the details. Before you start, make a couple of marks on your router table to show the stop and start points. Then you can use the marks to accurately cut the grooves in the leg blank.

MORE TEMPLATES. There's one more thing to do before cutting the legs to their final shape — rout the curved groove for the sides. The drawings at right walk you through this process as well as the other major steps you'll need to take to complete the legs.

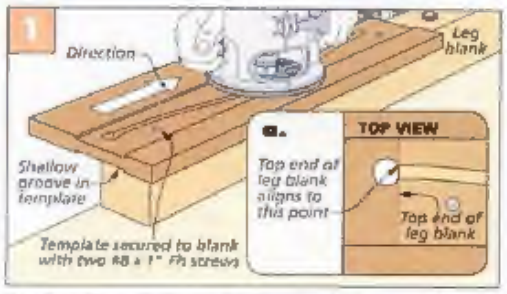
I started by making two templates — one to lay out the profile of the legs and another to rout the grooves for the sides. It sounds more confusing than it really is. For the dimensions and process of making the groove jig, turn to Shop Notebook on page 30.

Figure 1 shows the template in action. A recess in the template and two screws into the waste area of the leg blank keep it positioned properly. Make a first pass with the template in place, then you can remove it to rout it to final depth if your pattern bit isn't long enough to reach the full depth.

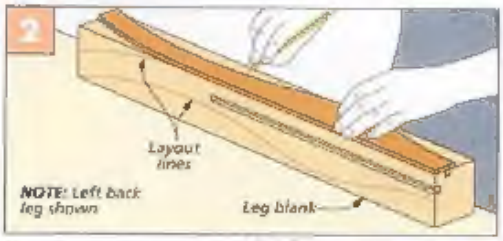
SHAPING THE LEGS. After squaring up all the mortises with a chisel, you're ready to start shaping the legs. Figure 2 shows how to mark the layout. Then, cut the legs to shape at the band saw. You'll notice in Figure 4 how I saved the waste and taped it back in place to keep the blank square for all the cuts.

Finally, grab a rasp and some sandpaper to shape the inside corner of the legs. Notice how the rounded over shape tapers up the leg (Figure 5).

How-To: ROUT & SHAPE

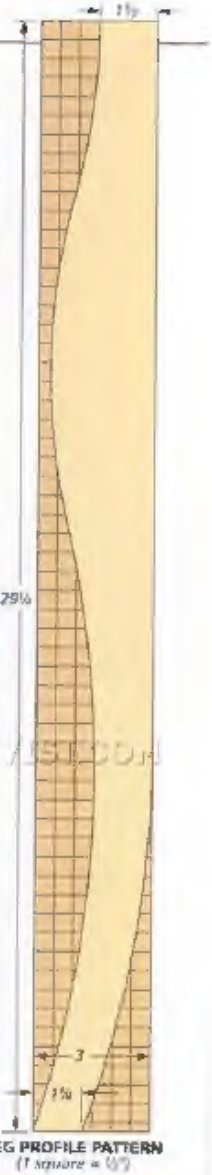


Routing Curved Channel. After securing the template with screws, a hole drilled in the top of the template allows you to place your router on the blank and rout the curve.

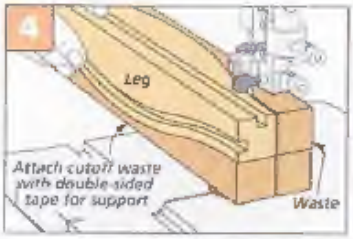


Lay Out the Shape. Trace the shape of the leg using the profile template. Note the orientation of the shape on the two adjacent faces.

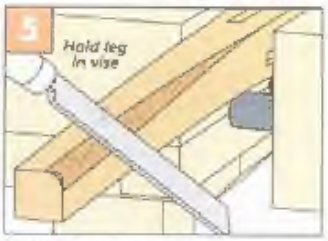
Cutting the Leg Profile. Stay on the waste side of the cut as you shape the leg. Hang on to the cutoff waste for later. You'll need it to cut the adjacent face.



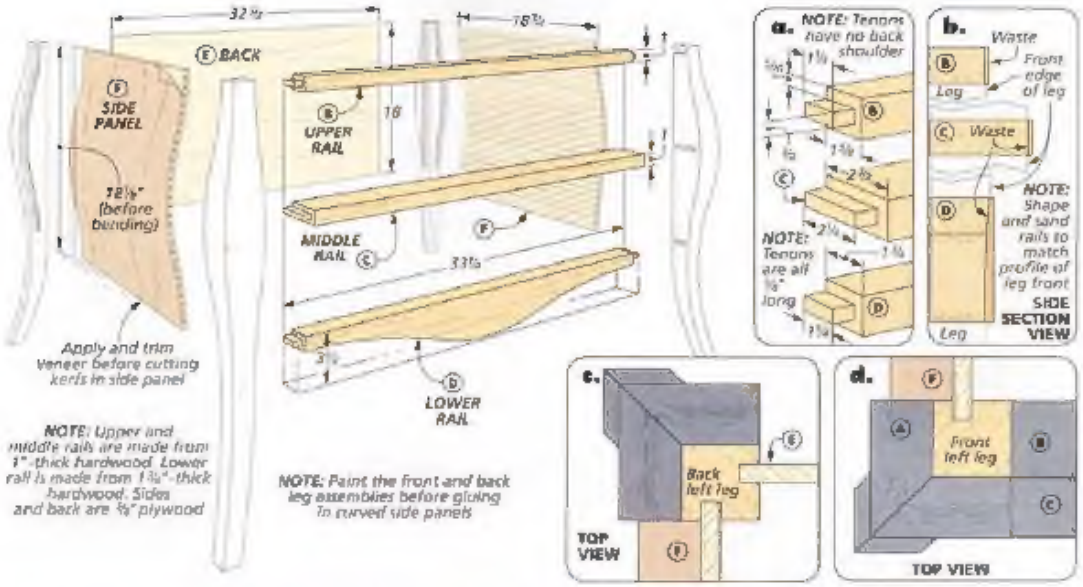
LEG PROFILE PATTERN
(1 square = ½")



Second Cut. Tape the waste back in place on the blank and cut the second face, completing the shape of the leg.



Inside Corner. I created a radius on the inside edge corner of the legs with a bit of rasping and sanding.



Add the BACK, SIDES & RAILS

Three rails join the two front legs and divide the open space into two drawer compartments. The back legs are joined with the back fitting into the long grooves you routed earlier. The front and back sub-assemblies are then painted before you move on to installing the sides.

FRONT RAILS. Start by cutting the three rails to overall size. Note that the lower rail is glued up from narrower stock to attain the final width and thickness.

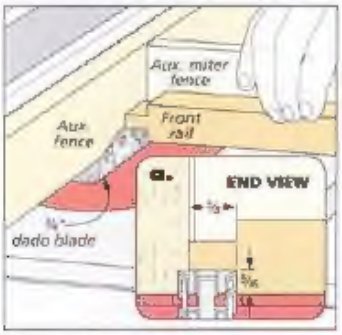
TENONS. At the table saw, install a dado blade and cut the tenons on each of the rails. For the upper and middle rails, this isn't a problem (left drawing below). But for the wider lower rail, I used a different approach. You can see how I did it in the center drawing below.

BOTTOM RAIL. Use the pattern below to make a template to lay out the curve on the bottom rail. Cut out the curve at the band saw and sand it smooth.

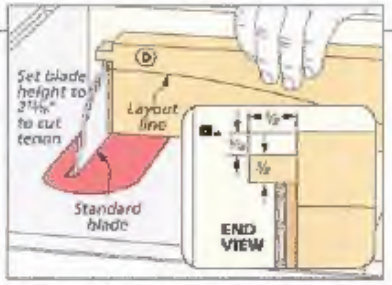
ASSEMBLY. This is a good time to dry assemble the rails in the front legs. Not only do you need to verify that they fit properly, but you also need to mark the front edges to match the curves of the legs (right drawing below). I used a combination of hand planes, sanding, and scraping to shape the profiles. For the lower rail, a long straightedge helps keep the profile consistent.

Now you can install the front rails and clamp the assembly. I used the template to cut out some cauls for clamping the assembly (Figure 1 on the facing page).

How-To: MAKE RAILS

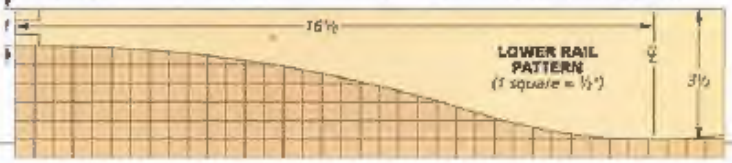


Rail Tenons. To cut the tenons on the rails, I used the rip fence as a stop to control the length of the tenons.



Bottom Rail Tenon. The wide lower rail called for a different setup. I used a combination blade to nibble away the waste.

Curves. Mark the profile of the legs on the ends of the rails so you have a reference while shaping them.



After cutting the plywood back to size, glue it into the long mortise in the back legs, clamping it as you did the front.

PAINT. Normally, painting and finishing come at the end of a project, but in this case it's much easier to paint the front and back before moving on. This way, you don't have to worry about getting paint on the veneered side panels you'll be adding next.

ADD THE SIDES

The side panels provide the "bulge" in the bombé chest. Bending them to fit the curved mortises might seem like a difficult proposition, but by cutting a series of kerfs on the inside of the panels, you'll find that the plywood will cooperate. (Refer to the article on page 42).

VENEER. I began with slightly long panels. This way, I could add the veneer and then trim them both to final size. Spray contact adhesive is perfect for attaching the paper-backed veneer. The glue is strong, but still elastic enough to accommodate the bending process.

Spray the plywood and the veneer with the contact cement and let it set up on both panels. When it feels dry to the touch, position the veneer and use a roller to force out any air bubbles trapped under the surface. Start in the middle and work your way outward (Figure 2). Leave the panels extra long, then use the legs to mark final length after bending.

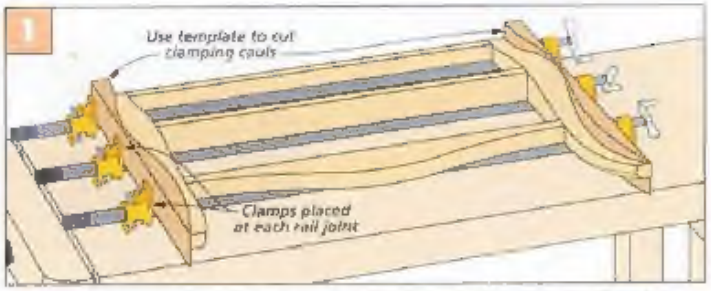
KERFING. Cutting the kerfs is easy, but you first need to get your table saw set up properly for the cuts. The article on page 42 will help you get started. After zeroing in on your setup, cut the kerfs across the full width of both sides.

INSTALLATION. You'll find it helpful to ease the inside surface of the sides to make it easier to fit them into the curved mortises on the legs (Figure 5). You want a snug fit, not too tight.

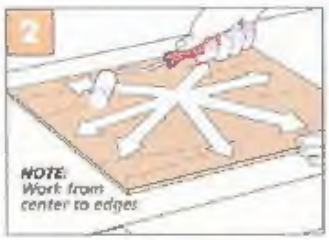
Once you're happy with the fit, you can trim the panels to final length and install them in the grooves in the legs. Figure 6 shows how you can use the cauls again to keep the legs flat on your bench as you insert the panels.

In Figure 7, the front and back subassemblies are joined. All you need to do is add the glue and clamp the side panels in place. Once again, use the cauls to clamp the assembly. I used three clamps on each side of the chest.

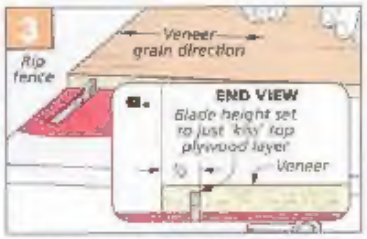
How-To: BUILD FRONT & SIDES



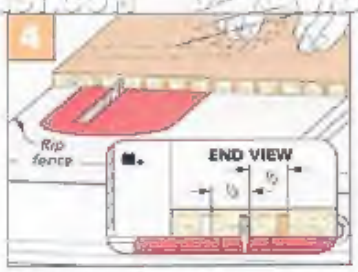
Assemble Front Rails. After shaping and sanding the front rails, slip them into the mortises on the legs and add a clamp at each joint.



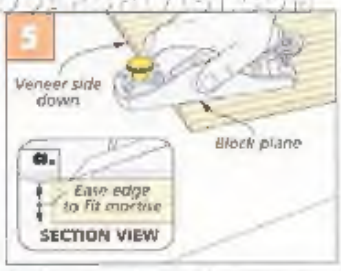
Veneer. When the contact cement is dry, set the veneer in place and use a roller to force out the air bubbles.



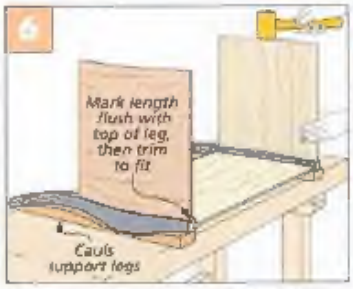
Kerf Cutting. With the blade height set to touch the last ply, start with the fence set to ½" and make the first cut.



Repeat Cuts. After the first pass, move the fence ½" and repeat. Keep going until you've kerfed the entire panel.

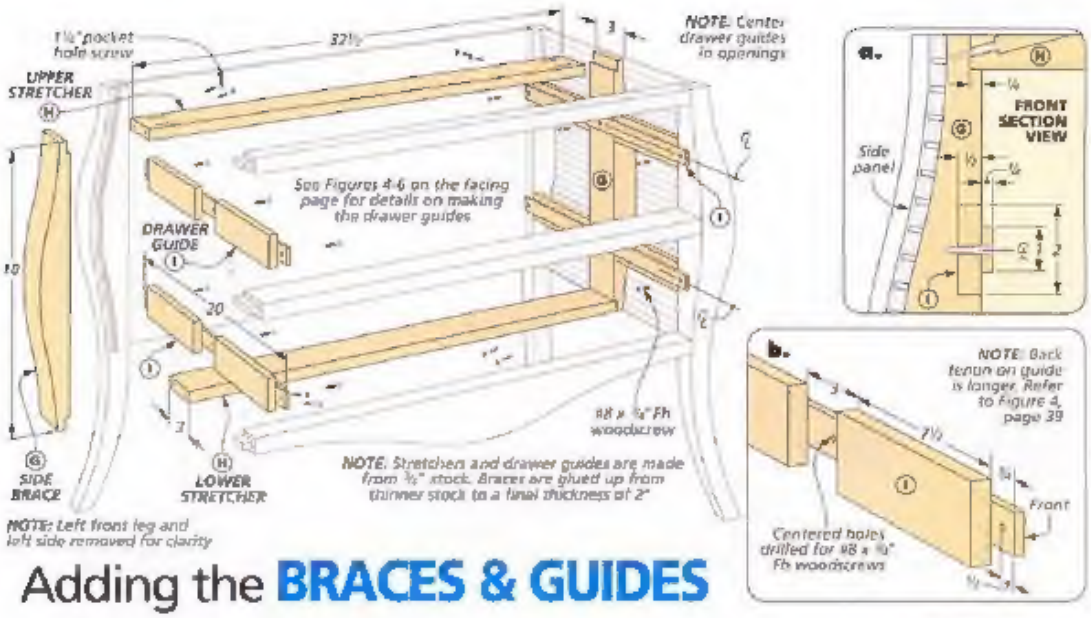


Easing the Edges. A block plane is the perfect tool for shaving the panel to fine-tune the fit into the mortise.



Sides. You want a snug fit when installing the panels. You can tap them with a mallet to ensure they're seated.

Assembly. Make sure everything remains square while you add clamps during the final assembly.



Adding the BRACES & GUIDES

One unique feature of the bombé chest is the frame that fits between the two sides. Two braces are shaped to fit the inside contours of the sides. The braces are connected by two stretchers that span the width of the chest. The braces also serve to hold the drawer guides.

SIDE BRACES. You'll want to start by gluing up a pair of oversize, hardwood blanks for the side braces. After the glue dries, clean them up, then cut and plane them to final size.

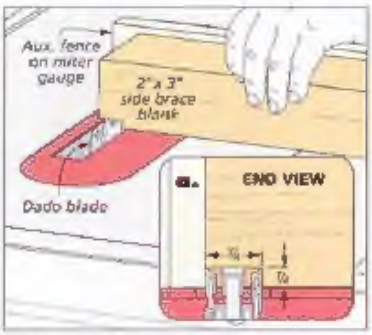
RABBET. The ends of the braces need a shallow rabbet to form a pocket that helps you position the stretchers, as shown in detail 'a' above. At the table saw, install a ¾" dado blade. Use a miter gauge equipped with an auxiliary fence to cut the rabbets on each end of the brace blanks (left drawing below).

SHAPING. The hardboard leg template you made earlier is all you need to trace the shape of the curve on the blanks. The center drawing below shows how to register the template at the end of the stretcher and where the curve meets the side. After marking the blanks, cut them to shape at the band saw. Check the fit as you work to smooth the edge and strive for a seamless joint on the inside of the case (Figure 1 on the opposite page).

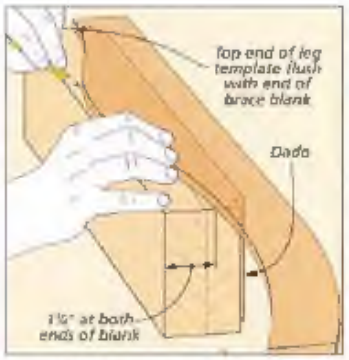
In order for the drawer guides to be in the proper position, you'll set the flat, inside face of the braces flush with the inside edge of the legs. It's okay to start with the inside face a bit proud, though. You can easily shave it flush on the jointer before you install it permanently.

When you have a good fit, attach the braces to the sides with glue. A plywood spacer helps position the braces in the center of the case and also keeps

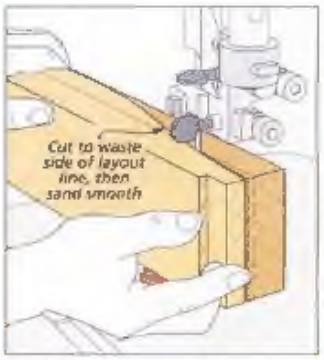
How-To: MAKE BRACES



Rabbets. Rabbets on the ends of the braces create a pocket for the stretchers. Cut them first, while the blank is square.



Brace Layout. Use the hardboard leg template to lay out and mark the shape of the leg on the blank.



Band Saw. As you cut the leg to final shape at the band saw, make sure to stay on the waste side of the cut.

them square while you glue them to the curved sides (Figure 2).

STRETCHERS. Now cut the two hardwood stretchers to final size. Figure 3 shows how I used a jig to drill the pocket holes in both ends of each stretcher. The pocket hole joints are very strong and ensure a long life for the chest. When you attach the stretchers, the pocket holes in both face outward for easy access. The main drawing on the facing page shows the orientation.

DRAWER GUIDES. Next up are the hardwood drawer guides. Rather than using metal drawer slides, I decided to go for a more traditional wood guide instead. You can see in the main drawing and detail 'a' that the guides are attached to the side braces and to the legs. I started by cutting two pairs of blanks.

While you're at the table saw, use an auxiliary fence on the miter gauge to cut rabbets on both ends of the blanks. Note that the rabbet on the front edge is shorter (Figure 4a) than the one on the rear (Figure 4b). I just marked the length of each rabbet and aligned the blade on these marks to make the cuts.

Before moving on to cut the wide dadoes that fit over the side braces, I marked the exact locations on each of the workpieces by holding them in place inside the chest. This way, you're guaranteed the dado location is spot on.

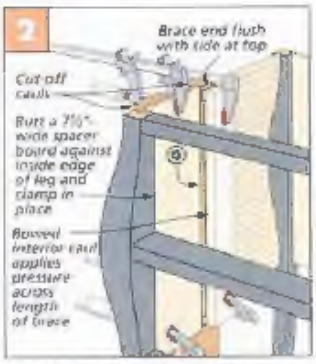
I attached a longer auxiliary fence to the miter gauge to cut the centered notch in the guides. You can align the layout marks with the notch in the fence (Figure 5). All you need to do is cut inside the lines. Test each piece by dry fitting it on the brace. When you have a snug fit for each one, check to make sure it's square in the opening and not tilted.

Finally, install an auxiliary rip fence and bury the dado blade to expose only ½". Then, cut the rabbets on the upper and lower edges of the drawer guides. Be sure to use a push block, as shown in Figure 6. Detail 'ba' shows the dimensions for this cut.

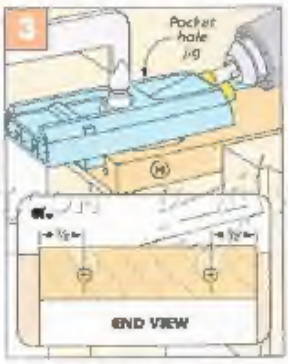
All that remains now is to drill the countersunk screw holes in the ends and center of the drawer guides. Detail 'b' on the opposite page shows the locations. Now install the guides, making sure the short rabbet is on the front leg. Then you just screw the guides in place, centered in the opening.

How-To: INSTALL BRACES & GUIDES

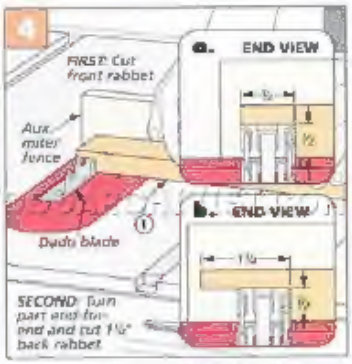
Fitting the Brace. After cutting the brace at the band saw, sand the curve smooth, checking the fit against the side.



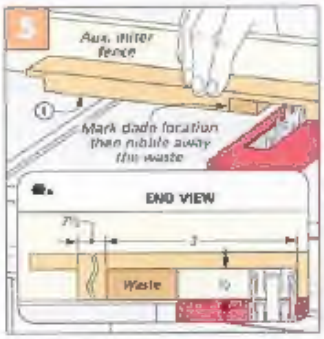
Positioning. Use a spacer board clamped to the sides to position the braces. Then you can add the glue.



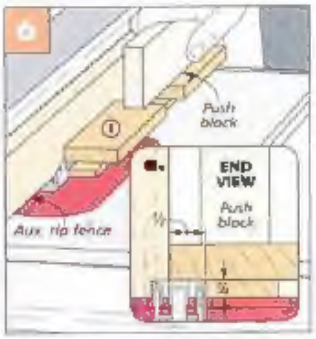
Pocket Holes. You'll need to drill a pair of pocket holes in each end of both stretchers for a solid assembly.



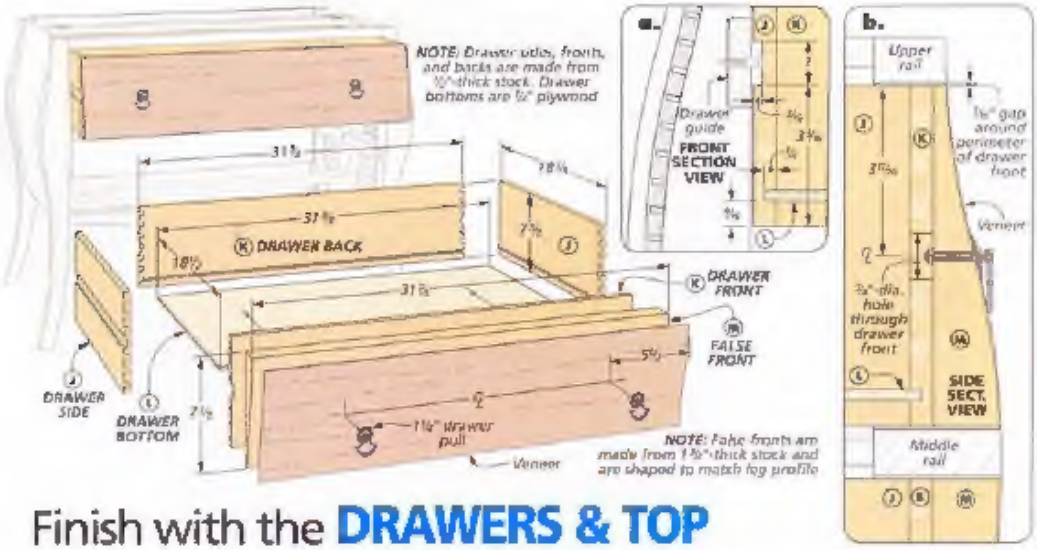
Rabbet. The first step in making the drawer guides is to cut rabbets on the ends of the blanks to fit over the legs.



Center Dadoes. Mark the position of the dadoes that fit over the braces. Remove the waste with a dado blade.



More Rabbets. Attach an auxiliary rip fence and bury the dado blade to cut the rabbets on the edges of the guides.



Finish with the DRAWERS & TOP

The two large drawers give the chest plenty of storage space. I used my dovetail jig for the joinery. While the assembly of the boxes is routine, the false fronts are anything but. They need to be shaped to match the profile of the legs. It may sound like a challenging task, but I found a method that makes it easy to do. After that, all that remains is to build the top and put it all together.

DRAWERS. I used poplar for the drawer fronts, backs, and sides. Follow the instructions for your dovetail jig to cut half-blind joints. The left drawing below gives you an idea of the spacing. The center drawing shows how to cut the groove for the plywood drawer bottom.

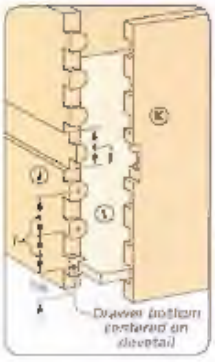
Now you can cut the drawer bottoms to final size and assemble the drawers. After clamping up the glue, cut the shallow grooves for the drawer guides as shown in the right drawing below.

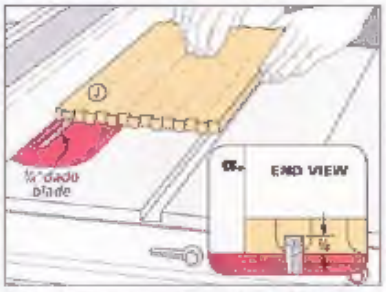
FALSE FRONTS. You'll need some thick stock for the false fronts in order to accommodate the curves. After cutting the blanks to size, drill the holes for the pulls while the stock is still square. You can see how I shaped the drawer fronts in Shop Notebook on page 31.

Before you start, however, you'll need to mark the profile on the blanks. For that, install the drawers in the chest, making sure they slide easily while pushing them in. Then, hold the blanks in place and trace the leg profiles on the edges of the blanks. Make sure to mark which is which to avoid confusion.

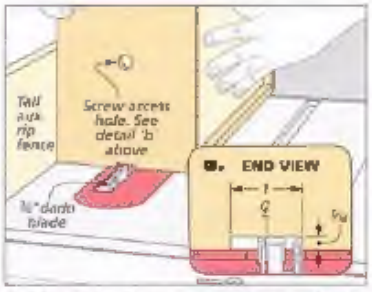
When you're done, a final sanding will prepare the blanks for veneer. Once again, I used contact cement to attach the veneer. After installing the veneer, trim it flush with the drawer fronts. Now install the drawer pulls with screws in the holes you drilled earlier.

How-To: MAKE DRAWERS





Groove. The groove for the plywood bottom needs to be located in the center of a tail so it's not visible after assembling the drawer.



Guide Dado. Cut the centered groove in the drawer sides, by making one pass. Then flip it end-for-end and make another.

CLEATS & TOP

The final step is to add a pair of cleats and the top. The cleats are mounted on the front and back, allowing you to attach the top with screws.

CLEATS. Before cutting the cleats, measure between the tops of the legs at the sides. This way, you'll get an accurate length for the two cleats and you can cut them to final size. Then drill the counterbored screw holes as shown in the main drawing at right. At this point, you can glue the front cleat in place, attached to the front rail.

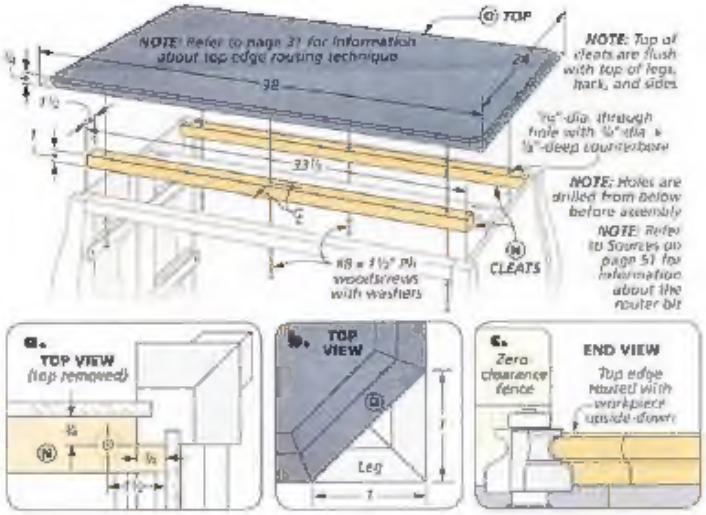
For the back cleat, I cut a notch to fit the ends around the corner of each leg. Detail 'a' has the dimensions for the notch and shows how everything fits together. With both cleats installed, you can turn your attention to the top.

THE TOP. I had to glue up narrow stock to attain the necessary width for the top. After the glue dries, clean up the squeeze-out and sand the top smooth.

In the main drawing, you can see that I beveled the corners as a decorative detail. The dimensions of the corners are shown in detail 'b.' You could cut the corners with a jig saw, but I found it was easier to cut them with a hand saw. Use a combination square to mark the 45° angle for the cut. After cutting off the corner, a sanding block makes it easy to sand away the saw marks and leave a nice, smooth surface.

Routing the edge profile presents a bit of challenge. It has to be done at the router table, since there's nothing for the bearing of the bit to ride on. That's not a problem for the long edges, but the narrow corners could easily be caught in the bit opening. You can find out how I solved the problem on page 31.

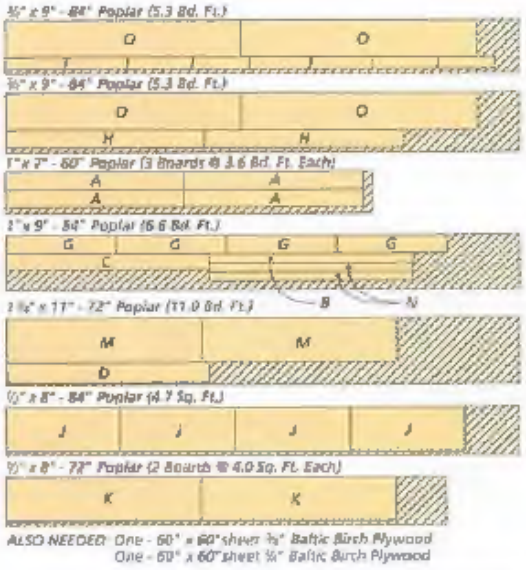
After painting the top to match the legs, attach it to the chest with screws through the cleats. Then I sprayed a couple of coats of lacquer on the project, and it was ready for its new home.



Materials, Supplies & Cutting Diagram

A	Leg Blanks (4)	3 x 3 - 29¼
B	Upper Rail (1)	1 x 1⅝ - 33½
C	Middle Rail (1)	1 x 2⅜ - 33½
D	Lower Rail (1)	1¾ x 3½ - 33¾
E	Back (1)	¾ ply. - 18 x 32¾
F	Side Panels (2)	¾ ply. - 18⅝ x 18¾
G	Side Braces (2)	2 x 3 - 18
H	Upper/Lower Stretchers (2)	¾ x 3 - 32½
I	Drawer Guides (4)	¾ x 2 - 20
J	Drawer Sides (4)	½ x 7⅞ - 18¾
K	Drawer Fronts/Backs (4)	½ x 7⅞ - 31⅞
L	Drawer Bottoms (2)	¼ ply. - 18½ x 31⅜
M	False Fronts (2)	1¾ x 7⅞ - 31⅞
N	Cleats (2)	1 x 1½ - 33½
O	Top (1)	¾ x 24 - 38

- (12) #8 x ¾" Fh Woodscrews
- (8) 1¼" Pocket Hole Screws
- (6) #8 x 1½" Fh Woodscrews w/ Washers
- (4) 1¼" Drawer Pulls
- (1) 2' x 8' Sheet Lacewood Veneer



ALSO NEEDED: One - 60" x 60" sheet ¾" Baltic Birch Plywood
One - 60" x 60" sheet ¼" Baltic Birch Plywood

woodworking technique

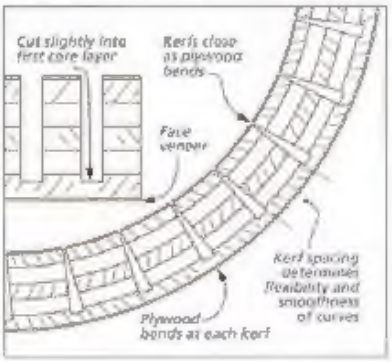
tips for plywood

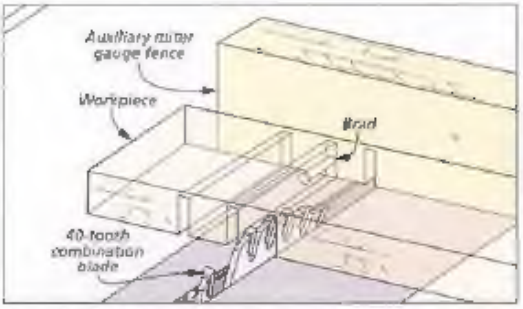
Kerf Bending

Woodworking would be pretty boring if we never tried new ideas. An interesting departure from the norm can be breaking away from straight lines and adding a few curves to a project. One easy way to make curved parts is to kerf bend plywood. There's no special equipment required, and the results can be eye-catching. The bombé chest on page 32 is a good example. The main photo above shows how the sides are kerfed and bent to conform to the curved shape of the legs.

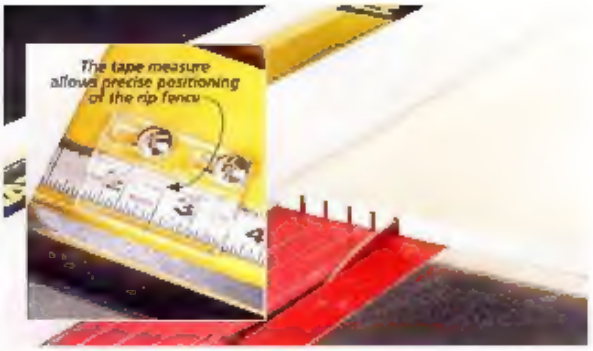
WHAT IS IT? Kerf bending involves cutting a series of regularly spaced deep grooves (kerfs) in the back side of a plywood workpiece. By removing this material, the veneered front face can easily be bent to a fairly tight curve. The depth of the kerfs and the distance between each one determine how tight a bend you can make.

KEY POINTS You can kerf bend just about any material from hardwood to plywood. But plywood is the most reliable, cost-effective, and easiest material to use. The perpendicular grain of





Kerf Cutting. For narrow project parts, like the curved aprons of a round table, use a miter gauge with an auxiliary fence to cut the kerfs. A brad in the fence acts as a key.



▲ To kerf larger workpieces, you can use the tape measure on the rip fence. When figuring the distance to move the fence between cuts, remember to take the width of the kerf into account.

the adjacent, overlapping plies adds a great deal of strength.

Hardwood plywood is preferred because it uses thin, hardwood plies rather than the thicker, softwood plies found in lower-quality plywood. And Baltic birch plywood reigns supreme with its very thin birch plies and lack of voids. If you're planning to veneer the workpiece, Baltic birch is an excellent substrate. (You'll want to glue the veneer to the plywood before bending to guarantee a good bond.)

DEPTH. As I said earlier, you can cut the kerfs on the table saw. But it takes a bit of patience to get the setup right. Setting the depth of cut is the first task. As a rule, I start with the blade set to just score the last full ply before the veneer. I should also mention that a 40-tooth combination blade cuts clean and works well for kerfing the plywood.

SPACING. The spacing between each kerf determines how tight a curve you can bend. The closer the kerfs, the tighter the possible radius. The drawing on the opposite page shows how the remaining plywood closes up when bent, preventing a tighter bend. I start at around ⅜" between cuts. This way, you can use the measuring tape on your table saw fence and move the fence ½" after each cut. (The ⅛" kerf + ⅜" wide remainder = ½".) The photo above and the inset show this process in action on a long workpiece.

Once you've made several cuts, you can test the flexibility. If the workpiece doesn't bend as much as you need it to, raise the blade just a hair and make some more test cuts.

When you're done, brush on some mineral spirits and then examine the results with a raking light. This will help you spot any subtle flat spots in the bend that might otherwise go unnoticed until later on, when you add a finish.

These flat spots, also known as telegraphing, are caused by the difference in the flexibility of the solid material left after the cuts and the thin, kerfed voids. The thin areas bend, but the remaining full-thickness plywood will remain flat. The margin photos on the opposite page show you how noticeable the flats can be.

The solution is to narrow the spacing between the kerfs. You can sand the surface lightly when you're done to help blend the two. But obviously you can't sand too deeply in plywood before you burn through the outer veneer of the plywood, or in the case of the bombé chest, the figured veneer. Again, a little bit of experimenting will help you find the right spacing so you can avoid having to sand away any flat spots.

CROSSCUT JIG. When it comes to cutting consistently spaced kerfs in narrow parts, you can use a simple jig. Since this operation is similar to cutting finger joints, you can use the same principle here. But in this case, the accuracy isn't as critical. So instead of a super accurate jig, all you need is a brad in the face of an auxiliary miter gauge fence, like the one shown in the left drawing at the top of the page. After making a cut, shift the workpiece to the right, placing the groove over the brad, and make another cut. You'll find that you can move quickly through the process, even in a large panel.

SUPPORTING THE BEND. After kerfing the workpiece, you'll still need a way to support it in your project. In the bombé chest, I fit the curved sides in a pair of grooves in the front and back legs, but I also added a center support. (Refer to page 38 to see you how this works.)

For long bends, a hardwood corner cut to fit will secure the bend and preserve the curve. The photo below shows what I mean and the drawings show how to cut the plywood.

You'll be surprised how easy this technique is to learn. And it will open up a lot of new ideas and possibilities for your projects.

▲ When bending a tight radius, you might need to remove more of the plywood. This prevents the plies from closing up and limiting the bend.

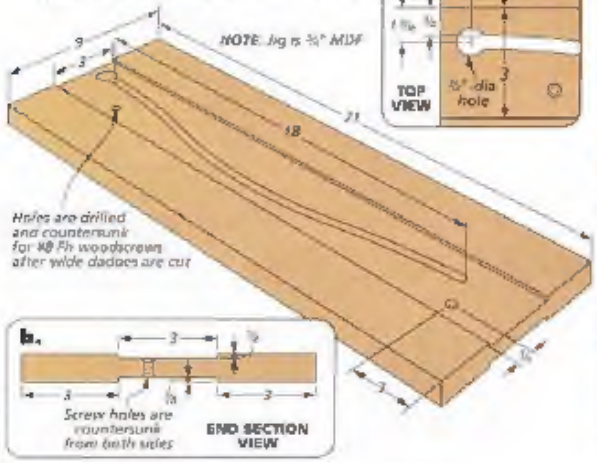
Curved Groove Jig

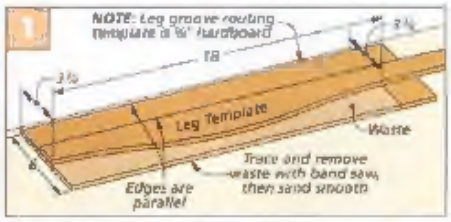
The curves in the bombé chest on page 32 make the project appear more difficult than it actually is. In fact, every curve is derived from the basic leg pattern on page 35. I even used that pattern as a template to make the jig shown below for routing the curved groove in the legs.

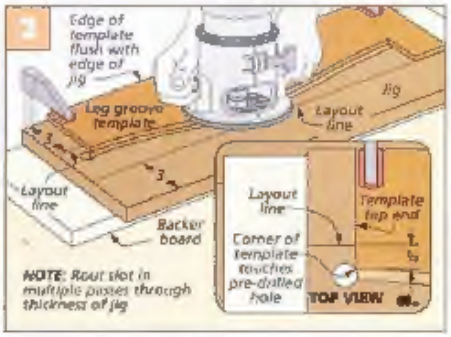
You can begin by cutting a piece of ¼" hardboard as in Figure 1. Then position the leg template on the blank as shown and trace the curve with a pencil. Mark a line at 18" on the template blank, the point at which you'll want to stop the groove. You can cut the curve at the band saw and then sand it smooth, making sure no bumps or depressions remain.

Now you'll need a ¾" MDF blank for the jig. The drawing below has the dimensions. Detail 'a' shows the location for a stepped hole in the jig. After drilling the hole, clamp the template you just made to the blank, as in Figures 2 and 2a. Make sure you have a backer board beneath the jig blank so you don't rout into your bench. Then use a pattern bit set to a depth of about ¼" and make several passes to complete the curved slot.

With a dado blade in the table saw, cut the shallow ¾"-wide groove in the template. This aligns the jig to the leg blanks. A pair of countersunk screw holes (in waste areas) allows you to mount the jig to the blanks.







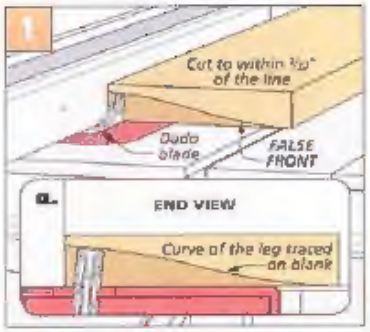
Curved Drawer Fronts

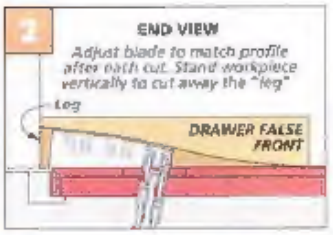
Shaping the curved false fronts for the bombé chest is one of several challenging tasks in the project. Fortunately, there's a straightforward solution to the problem.

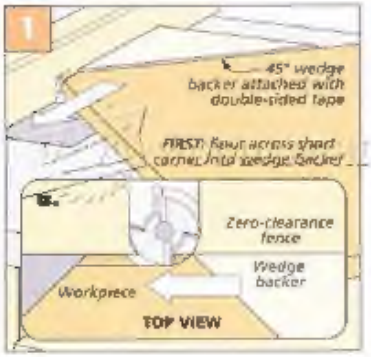
After tracing the profile shown on page 40, you can set up a dado blade to cut away the bulk of the waste from the blanks to form the rough profile.

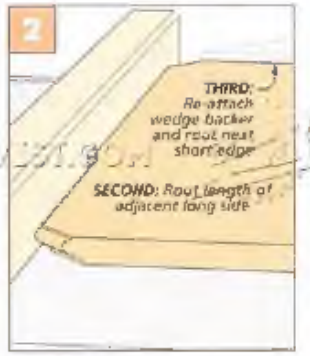
For the first cut, set the rip fence about ⅓" away from the blade and the blade height just below the mark (Figures 1 and 1a). This will leave you a small "leg" to support the workpiece as you make the remaining cuts. Figure 2 shows the technique of incrementally moving the rip fence back and lowering the dado blade to match the profile.

When you've removed as much of the waste as you can at the table saw, you're ready to refine the shape of the blank. For this, I turned to a block plane first, to knock down the high spots. To finish up, all you need is a sanding block contoured to match the curve. I started with 80-grit sandpaper and moved through the grits until I had a smooth surface. A long straightedge is the perfect tool for making sure the surface is consistent as you go (Figure 3).









Corner Edge Routing

At first glance, routing the edge profile on the top of the bombé chest looks pretty simple. But the narrow corners can easily be damaged by being pulled into the bit at the router table since they're too small to be supported by the fence.

The solution I came up is pretty simple, but it was a lifesaver. All you need to do is attach a 45° backer board to the workpiece with double-sided tape. This way, the long backer board hugs the fence as you pass the tabletop past the bit. (Figure 1). You can also see how I improved the setup by making a zero-clearance fence around the bit, as illustrated in Figure 1a.

Drilling Face Mortises

The two upper stretchers on the sink stand (page 22) have vertical mortises cut on their inside faces. In order to drill these mortises precisely, I came up with a simple procedure.

The first step, as usual, is to lay out the mortise locations carefully. Then position a drill press fence to align the Forstner bit with the mortise's upper end. Clamp a stop to the fence to establish the location of the mortise on the length of the stretcher, and you're ready to drill the upper hole, as shown in Figure 1.

To drill the hole at the other end of the mortise, insert a spacer between the fence and workpiece (Figure 2). With the two end points established, remove the spacer and drill out the rest of the mortise.